

Asbestos Diseases

What is asbestos?

Asbestos is a naturally occurring silicate fiber.

Diseases associated with asbestos

- Asbestosis - inflammation that results in scarring of the lung tissues
- Nonmalignant pleural disease - thickening and calcification of lung disease
- Cancer of the lung, larynx, pharynx
- Mesothelioma - a cancer affecting the lining of the lungs or abdomen
- Gastrointestinal cancer

Means of exposure

- Inhaling dust that penetrates deep into the lungs
- Swallowing dust that is “coughed up”
- Eating contaminated food

Asbestos diseases occurs usually 15 or more years after initial exposure. The risk of developing lung cancer increases significantly in those with a history of exposure to asbestos and tobacco smoking. Family members may also be at risk for asbestosis if exposed to fibers transported on work clothing.

Signs and symptoms will vary, based on the person and the type of asbestos disease.

Signs and Symptoms

Early Symptoms

- No symptoms
- Shortness of breath with activity
- Dry cough

Later stages

- A persistent and productive cough
- Chest tightness or pain
- A dry, crackling sound while inhaling

Sources of exposure

- Underground and open-casting mines
- Asbestos product manufacturing (insulation, roofing and building materials)
- Demolition and renovation of buildings
- Ship yards
- Automotive repair (brakes and clutches)
- Power plants and steel mills

Asbestos Diseases

Preventing asbestos diseases

- Use engineering controls to reduce exposure, such as
 - » Enclosing dust sources
 - » Using wet methods to prevent dust generation
 - » Substituting or using alternatives to asbestos
- Use individual preventative measures
 - » Wear an appropriate respirator
 - » Shower and change clothes at the end of the work day
 - » Avoid eating and drinking in exposure areas

Together, smoking and asbestos exposure significantly increase your chance of developing one of the asbestos diseases.

Treatment

- Eliminate or minimize future exposure to asbestos
- Stop smoking
- Obtain pneumonia vaccinations
- Obtain an annual flu vaccination
- Treat bacterial infections promptly
- Supplement oxygen, if needed

References

- <http://www.atsdr.cdc.gov>
- APHA Preventing Occupational Disease and Injury, 1991, page 114-125.
- Rosenstock L, Cullen MR, Brodtkin CA, Redlich CA Textbook of Clinical Occupational and Environmental Medicine, 2nd Edit., Philadelphia, El Sevier, 2005, p 374-377
- Asbestos Exposure and Your Job: At-Risk Occupations, Industries and Locations <http://www.mesothelioma-facts.com/atrisk.cfm>

